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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,319	10/22/2003	Philip D. Nguyen	2003-IP-010380U1	5926
7590 05/29/2007				
Robert A. Kent Halliburton Energy Services 2600 S. 2nd Street Duncan, OK 73536-0440				
		EXAMINER		
		TSOY, ELENA		
		ART UNIT		PAPER NUMBER
		1762		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/691,319	Applicant(s) NGUYEN ET AL.	
	Examiner Elena Tsoy	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 18-76 is/are pending in the application.
- 4a) Of the above claim(s) 20-24, 27-30, 37-41, 44, 47, 50-64 and 67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18, 19, 25, 26, 31-36, 42, 43, 45, 46, 48, 49, 65, 66 and 68-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/16/07</u> . | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

Amendment filed on April 9, 2007 has been entered. Claims 1-17 have been cancelled. New claims 68-76 have been added. Claims 18-76 are pending in the application. Claims 20-24, 27-30, 37-41, 44, 47, 50-64, and 67 are withdrawn from consideration as directed to a non-elected invention and species.

***Claim Objections***

Claims 28-29 are objected to because of the following informalities: status identifiers should be changed to (Withdrawn) because they depend on withdrawn claim 1.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 28 and 29 are confusing because they depend on cancelled claim 1.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The Examiner Note: for examining purposes, the limitations of claims directed to a method of making reduced-density coated particulates was not given a patentable weight because claims are processes of using reduced-density coated particulates, and it is held that the patentability of a chemical product is independent of how it was made.

3. Rejection of claims 18-19, 25, 31-33, 35-36, 42, 45-46, 48-49, 65-66 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McDaniel et al (US 20020048676) has been withdrawn due to amendment.
4. Rejection of claims 18-19, 32-33, 35-36, 49, 65-66 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Beck et al (US 4,493,875) has been withdrawn due to amendment.
5. Rejection of claims 18-19, 25, 31-36, 42, 45-46, 48-49, 65-66 under 35 U.S.C. 103(a) as being unpatentable over McDaniel et al in view of Nguyen et al (US 5908073) has been withdrawn due to amendment.
6. Rejection of claims 18-19, 32-36, 49, 65-66 under 35 U.S.C. 103(a) as being unpatentable over Beck et al in view of Nguyen et al has been withdrawn due to amendment.

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7. Rejection of claims 25, 42, 45-46 under 35 U.S.C. 103(a) as being unpatentable over Beck et al in view of McDaniel et al has been withdrawn due to amendment.

8. Rejection of claims 26 and 43 under 35 U.S.C. 103(a) as being unpatentable over McDaniel et al/Beck et al in view of McDaniel et al/McDaniel et al in view of Nguyen et al/Beck et al in view of Nguyen et al/, further in view of Murphey et al (US 4665988) has been withdrawn due to amendment.

9. Claims 68-70, 72-73, and 75-76 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McDaniel et al (US 20020048676) for the same reasons of record as set forth in paragraph 3 of the Office Action mailed on 1/18/2007 because the scope of invention of new claims are substantially identical to the scope of non-amended claims 18, 19, 25, 32 and, 35.

10. Claims 68-70, and 72 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Beck et al (US 4,493,875) for the same reasons of record as set forth in paragraph 4 of the Office Action mailed on 1/18/2007 because the scope of invention of new claims are substantially identical to the scope of non-amended claims 18, 19, 32, and 35.

11. Claims 68-70, 72-73, and 75-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDaniel et al in view of Nguyen et al (US 5908073) for the same reasons of record as set forth in paragraph 3 of the Office Action mailed on 1/18/2007 because the scope of invention of new claims are substantially identical to the scope of non-amended claims 18, 19, 25, 32 and, 35.

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12. Claims 68-70, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al in view of Nguyen et al for the same reasons of record as set forth in paragraph 4 of the Office Action mailed on 1/18/2007 because the scope of invention of new claims are substantially identical to the scope of non-amended claims 18, 19, 32, and 35.

13. Claim 73 and 75-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al in view of McDaniel et al for the same reasons of record as set forth in paragraph 5 of the Office Action mailed on 1/18/2007 because the scope of invention of new claims are substantially identical to the scope of non-amended claims 25, 45-46.

14. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDaniel et al/Beck et al in view of McDaniel et al/McDaniel et al in view of Nguyen et al/Beck et al in view of Nguyen et al/, further in view of Murphey et al (US 4665988) for the reasons of record set forth in paragraph 8 of the Office Action mailed on 1/18/2007 because the scope of invention of new claims are substantially identical to the scope of non-amended claim 26.

15. Claims 18-19, 25, 31-33, 35-36, 42, 45-46, 48-49, 65-66, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDaniel et al in view of Martin et al (US 4,969,523).

McDaniel et al are applied here for the same reasons as forth in paragraph 3 of the Office Action mailed on 1/18/2007. McDaniel et al teach that the filler particles should be inert to components in the subterranean formation, e.g., well treatment fluids, and be able to withstand the conditions, e.g., temperature and pressure, in the well (See P81). However, McDaniel et al fail to teach that polystyrene divinylbenzene may be used as the density reducing material.

Martin et al teach that a combination of first and second particles having a density within the range of about 0.7 to about 4.0 (See column 3, lines 12-26), wherein first particles has a

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density selected from the lower portion of the density range such as polystyrenedivinybenzene (SVDB) (See column 3, line 28) and the second particles has a density selected from the upper portion of the density range such as sand (See column 3, line 33) may be used in a servicing fluid for gravel packing of subterranean well (See column 2, lines 12-15). In other words, Martin et al teach that low density SVDB is suitable for the use in a servicing fluid, i.e. it is inert to components in the subterranean formation, e.g., well treatment fluids, and is able to withstand the conditions, e.g., temperature and pressure, in the well.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used low density SVDB as the density reducing material in McDaniel et al since Martin et al teach that low density SVDB is suitable for the use in a servicing fluid, and McDaniel et al do not limit the density reducing material.

16. Claims 18-19, 25, 31-33, 35-36, 42, 45-46, 48-49, 65-66, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDaniel et al in view of Nguyen et al (US 5908073), further in view of Martin et al for the reasons of record set forth in paragraph 6 of the Office Action mailed on 1/18/2007 and above.

17. Claims 18-19, 32-33, 35-36, 49, 65-66, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al in view of Martin et al.

Beck et al are applied here for the same reasons as forth in paragraph 4 of the Office Action mailed on 1/18/2007. Beck et al et al teach that a void containing particle having density of less than 0.8 g/cc (See column 1, lines 67-68) may be used to reduce density of a proppant approaching densities of a typical fracturing fluid to avoid settling problem (See column 1, lines

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57-62). Beck et al fail to teach that polystyrene divinylbenzene of 0.7-0.8 g/cc may be used as a density reducing material.

Martin et al are applied here for the same reasons as above.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used SVDB of 0.7-0.8 g/cc as the density reducing material in Beck et al instead of a void containing particle having density of less than 0.8 g/cc with the expectation of avoiding settling problem since of SVDB has density of less than 0.8 g/cc, and Martin et al teach that low density SVDB is suitable for the use in a servicing fluid.

18. Claims 18-19, 32-33, 35-36, 49, 65-66, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al in view of Nguyen et al, further in view of Martin et al for the reasons of record set forth in paragraph 7 of the Office Action mailed on 1/18/2007 and above.

19. Claims 25, 42, and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al in view of McDaniel, further in view of Murphey et al for the reasons of record set forth in paragraph 5 of the Office Action mailed on 1/18/2007 and above.

20. Claims 26 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over cited prior art applied to claim 25 and 42 above, further in view of Murphey et al (US 4665988) for the reasons of record set forth in paragraph 8 of the Office Action mailed on 1/18/2007 and above.

### ***Response to Arguments***

21. Applicant's arguments with respect to claims 18, 19, 25, 26, 31-36, 42, 43, 45, 46, 48, 49, 65, 66, and 68-76 have been considered but are moot in view of the new ground(s) of rejection.



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As to Election/Restriction, Applicants' arguments filed April 9, 2007 have been fully considered but they are not persuasive.

(A) Applicants disagree that claims 28-29 should be withdrawn from consideration as directed to a non-elected invention. Applicants designated claims 28-29 as falling within the elected group (Group II directed to a method of treating a subterranean formation) designated by Applicants.

The Examiner respectfully disagrees with this argument. Claims 28-29 depend on non-elected claim 1 of Group I. Since Group I is withdrawn from consideration as directed to a non-elected invention, so are claims 28-29. Note that in Election/Restriction requirement the Examiner accidentally missed to include claims 28-29 into Group I.

(B) Applicants argue that since the Examiner agrees with that claim 18 is generic to both independent claims 35 and 50 because a servicing fluid of claim 18 may be used as a fracturing fluid or for forming a gravel pack (See specification, P5), Applicants would like to clarify that claims 50-64, and 67 are withdrawn from consideration as being directed to a non-elected species, rather than a non-elected invention. Thus, upon allowance of a generic claim, Applicants are entitled to the consideration of additional species which include all the limitations of an allowed generic claim as provided by 37 C.F.R. 1.141.

The Examiner agrees that claim 67 is withdrawn as being directed to a non-elected species. However, the Examiner disagrees with the argument about claims 50-64: claims 50-64 do not depend on claim 18, but relate to method of installing a gravel pack which is an independent invention, not species.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 5:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy  
Primary Examiner  
Art Unit 1762

ELENA TSOY  
PRIMARY EXAMINER  


May 18, 2007